

Amendment to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An electronic device comprising:  
a first logic circuit having a first thin film transistor over an insulating surface;  
a second logic circuit having a second thin film transistor over the insulating surface;  
and  
a detection means which detects [[an]] a first operating frequency of the first logic circuit and a second operating frequency of the second logic circuit, and which outputs a first detection result to a first threshold value control circuit and a second detection result to a second threshold value control circuit,  
wherein the first thin film transistor comprises a first gate electrode inputted with a first logic signal and a second gate electrode inputted with a first threshold value control signal from the first threshold value control circuit,  
wherein the second thin film transistor comprises a third gate electrode inputted with a second logic signal and a fourth gate electrode inputted with a second threshold value control signal from the second threshold value control circuit, and  
wherein the first operating frequency is different from the second operating frequency.
2. (Currently Amended) The electronic device according to claim 1,  
wherein a first semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film, and  
wherein a second semiconductor thin film is provided over the fourth gate electrode and the third gate electrode is provided over the second semiconductor thin film.

3. (Currently Amended) The electronic device according to claim 1, comprising [[A]] a CPU including the first and second logic circuit and the detection means.

4. (Currently Amended) The electronic device according to claim 1, comprising an image processing circuit including the first and second logic circuit and the detection means.

5. (Previously Presented) The electronic device according to claim 1, wherein the electronic device is one selected from the group consisting of a digital camera, a notebook personal computer, a portable information terminal, and an image reproducing device provided with a recording medium.

6. (Currently Amended) An electronic device comprising:  
a first logic circuit having a first thin film transistor over an insulating surface;  
a second logic circuit having a second thin film transistor over the insulating surface;  
and  
a detection means which detects [[an]] a first operating frequency of the first logic circuit and a second operating frequency of the second logic circuit, and which outputs a first detection result to a first threshold value control circuit and a second detection result to a second threshold value control circuit,  
wherein the first thin film transistor comprises a first gate electrode inputted with a first logic signal and a second gate electrode inputted with a first threshold value control signal from the first threshold value control circuit, [[; and]]  
wherein the second thin film transistor comprises a third gate electrode inputted with a second logic signal and a fourth gate electrode inputted with a second threshold value control signal from the second threshold value control circuit,  
wherein an amount of a first current flowing between a first source electrode and a first drain electrode of the first thin film transistor is controlled by the first threshold value control signal,

wherein an amount of a second current flowing between a second source electrode and a second drain electrode of the second thin film transistor is controlled by the second threshold value control signal, and

wherein the first operating frequency is different from the second operating frequency.

7. (Currently Amended) The electronic device according to claim 6,  
wherein a first semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film, and  
wherein a second semiconductor thin film is provided over the fourth gate electrode and the third gate electrode is provided over the second semiconductor thin film.

8. (Currently Amended) The electronic device according to claim 6, comprising a CPU including the first and second logic circuit and the detection means.

9. (Currently Amended) The electronic device according to claim 6, comprising an image processing circuit including the first and second logic circuit and the detection means.

10. (Previously Presented) The electronic device according to claim 6, wherein the electronic device is one selected from the group consisting of a digital camera, a notebook personal computer, a portable information terminal, and an image reproducing device provided with a recording medium.

11. (Currently Amended) An electronic device comprising:  
a first logic circuit having a first thin film transistor over an insulating surface;  
a second logic circuit having a second thin film transistor over the insulating surface;  
and  
a recording medium which detects [[an]] a first operating frequency of the first logic circuit and a second operating frequency of the second logic circuit, and which stores a program

for outputting a first detection result to a first threshold value control circuit and a second detection result to a second threshold value control circuit,

wherein the first thin film transistor comprises a first gate electrode inputted with a first logic signal and a second gate electrode inputted with a first threshold value control signal from the first threshold value control circuit,

wherein the second thin film transistor comprises a third gate electrode inputted with a second logic signal and a fourth gate electrode inputted with a second threshold value control signal from the second threshold value control circuit, and

wherein the first operating frequency is different from the second operating frequency.

12. (Currently Amended) The electronic device according to claim 11,

wherein a first semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film, and

wherein a second semiconductor thin film is provided over the fourth gate electrode and the third gate electrode is provided over the second semiconductor thin film.

13. (Currently Amended) The electronic device according to claim 11, comprising a CPU including the first and second logic circuit and the recording medium ~~detection means~~.

14. (Currently Amended) The electronic device according to claim 11, comprising an image processing circuit including the first and second logic circuit and the recording medium ~~detection means~~.

15. (Previously Presented) The electronic device according to claim 11, wherein the electronic device is one selected from the group consisting of a digital camera, a notebook personal computer, a portable information terminal, and an image reproducing device provided with a recording medium.

16. (Currently Amended) An electronic device comprising:

a first logic circuit having a first thin film transistor over an insulating surface;

a second logic circuit having a second thin film transistor over the insulating surface;

and

a recording medium which detects [[an]] a first operating frequency of the first logic circuit and a second operating frequency of the second logic circuit, and which stores a program for outputting a first detection result to a first threshold value control circuit and a second detection result to a second threshold value control circuit,

wherein the first thin film transistor comprises a first gate electrode inputted with a first logic signal and a second gate electrode inputted with a first threshold control signal from the first threshold value control circuit,

wherein the second thin film transistor comprises a third gate electrode inputted with a second logic signal and a fourth gate electrode inputted with a second threshold control signal from the second threshold value control circuit, [[:and]]

wherein an amount of a first current flowing between a first source electrode and a first drain electrode of the first thin film transistor is controlled by the first threshold value control signal,

wherein an amount of a second current flowing between a second source electrode and a second drain electrode of the second thin film transistor is controlled by the second threshold value control signal, and

wherein the first operating frequency is different from the second operating frequency.

17. (Currently Amended) The electronic device according to claim 16,

wherein a first semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film, and

wherein a second semiconductor thin film is provided over the fourth gate electrode and the third gate electrode is provided over the second semiconductor thin film.

18. (Currently Amended) The electronic device according to claim 16, comprising a CPU including the first and second logic circuit and the recording medium ~~detection means~~.

19. (Currently Amended) The electronic device according to claim 16, comprising an image processing circuit including the first and second logic circuit and the recording medium ~~detection means~~.

20. (Previously Presented) The electronic device according to claim 16, wherein the electronic device is one selected from the group consisting of a digital camera, a notebook personal computer, a portable information terminal, and an image reproducing device provided with a recording medium.

21. (Withdrawn) A driving method of a semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs a detection result to a threshold value control circuit,  
wherein the detection means discriminates a first mode or a second mode; and  
wherein the threshold value control circuit outputs a threshold value control signal according to the first or the second mode to the logic circuit.

22. (Withdrawn) A driving method of a semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs a detection result to a threshold value control circuit,  
wherein the detection means discriminates a pending mode or an active mode; and  
wherein the threshold value control circuit outputs a threshold value control signal which raises a threshold value of the thin film transistor of the logic circuit when the detection means discriminates the pending mode.

23. (Currently Amended) An electronic device comprising:  
a substrate having an insulating surface;  
a first logic circuit having a first thin film transistor over the substrate;  
a second logic circuit having a second thin film transistor over the substrate;  
a detection means for detecting [[an]] a first operating frequency of the first logic  
circuit, electrically connected to the first logic circuit, and for detecting a second operating  
frequency of the second logic circuit, electrically connected to the second logic circuit; [[and]]  
a first threshold value control circuit electrically connected to the detection means; and  
a second threshold value control circuit electrically connected to the detection means,  
wherein the first operating frequency is different from the second operating frequency.

24. (Withdrawn) A semiconductor device comprising:  
a substrate having an insulating surface;  
a logic circuit having a thin film transistor over the substrate;  
an address comparator electrically connected to the logic circuit;  
a counter electrically connected to the address comparator;  
a discrimination circuit electrically connected to the counter; and  
a threshold value control circuit electrically connected to the discrimination circuit.

25. (Currently Amended) An electronic device comprising:  
a substrate having an insulating surface;  
a first logic circuit having a first thin film transistor over the substrate;  
a second logic circuit having a second thin film transistor over the substrate;  
a detection means for detecting [[an]] a first operating frequency of the first logic  
circuit, electrically connected to the first logic circuit, and for detecting a second operating  
frequency of the second logic circuit, electrically connected to the second logic circuit; [[and]]

a first threshold value control circuit which is electrically connected to the detection means; and

a second threshold value control circuit which is electrically connected to the detection means,

wherein the first operating frequency is different from the second operating frequency,

wherein the first thin film transistor comprises a plurality of first gate electrodes; [[and]]

wherein the first threshold value control circuit is electrically connected to at least one of the plurality of first gate electrodes,

wherein the second thin film transistor comprises a plurality of second gate electrodes;

wherein the second threshold value control circuit is electrically connected to at least one of the plurality of second gate electrodes.

26. (Withdrawn) A semiconductor device comprising:

a substrate having an insulating surface;

a logic circuit having a thin film transistor over the substrate;

an address comparator electrically connected to the logic circuit;

a counter electrically connected to the address comparator;

a discrimination circuit electrically connected to the counter; and

a threshold value control circuit electrically connected to the discrimination circuit,

wherein the thin film transistor comprises a plurality of gate electrodes; and

wherein the threshold value control circuit is electrically connected to at least one of the plurality of gate electrodes.

27. (Previously Presented) The electronic device according to claim 1, wherein the detection means comprises:

an address comparator electrically connected to the logic circuit;

a counter electrically connected to the address comparator; and



a discrimination circuit electrically connected to the counter.

28. (Previously Presented) The electronic device according to claim 6, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.

29. (Withdrawn) The semiconductor device according to claim 22, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.

30. (Previously Presented) The electronic device according to claim 23, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.